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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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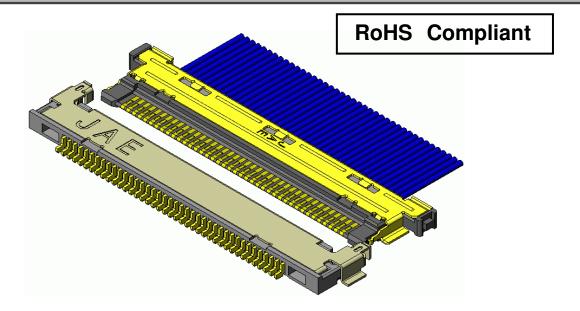




Fine-Coax Wire Connector for Small Portable Devices CONNECTOR

## **FI-JH Series**

MB-0179-2 October 2008



In addition to incorporating new functions such as one segment TV, the global trend of sliming cell phone size is accelerating. To slim the devices, the connectors need to be low profile. Also, the demand for anti-noise performance is growing in order to accommodate the multiple functions. To meet these demands the FI-JH Series horizontal connector, with a mating height of only 1mm and designed for anti-noise performance, has been developed.

#### **Features**

- ■Low profile and small size
- ■40 position mated dimensions: 6.1mm depth, 21.7mm width, 1.00mm height
- ■Stable connection by a secure 0.71mm valid contact length
- ■Low contact resistance at gold plated ground contact points on plug and receptacle
- ■Friction lock to prevent removal on impact
- ■+/- 0.5mm guide length for excellent insertion
- ■Supports automated mounting with embossed tape supply for receptacle
- ■Solder migration prevention structure with Ni barrier on receptacle
- ■Applicable wire: Coaxial 42 to 46 AWG

## **General Specifications**

■No. of Contacts : 30, 35, 40 pos.

■Pitch: 0.4mm

■Operating Temperature:

-40 Deg. C to +85 Deg. C

■Contact Resistance: 40m ohm max.

■Durability: 30 mating cycles

■Rated Current: AC, DC each 0.3A per pos.

■Rated Voltage: AC, DC each 50V per pos.

■Insulation Resistance: 100M ohm min.

■ Dielectric Withstanding Voltage:

AC 250Vr. m.s per minute

■Applicable Wire: 42 to 46 AWG

#### Materials and Finishes

| Component                         | t Material / Finish                                       |  |  |
|-----------------------------------|---|--|--|
| Receptacle (FI-JH**S-HF10-*)      |   |  |  |
| Contact                           | Copper alloy / Contact area  Au plating over Ni,          |  |  |
|                                   | Terminal area Au flash plating over Ni                    |  |  |
| Shell                             | Stainless steel (30 pos., 40pos.), Copper alloy (35 pos.) |  |  |
|                                   | / Contact area Au flash plating over Ni,                  |  |  |
|                                   | Terminal area Sn plating                                  |  |  |
| Insulator                         | Heat resistant plastic UL94V-0                            |  |  |
|                                   | Plug (FI-JH**C-B)   |  |  |
| Contact                           | Copper alloy / Contact area  Au plating over Ni,          |  |  |
|                                   | Connection area Au flash plating over Ni                  |  |  |
| Insulator                         | Heat resistant plastic UL94V-0                            |  |  |
| Base Shell                        | Stainless steel / Au flash plating over Ni                |  |  |
| Plug Cover Shell (FI-JH**C-CSH-1) |   |  |  |
| Cover Shell                       | Cover Shell Stainless steel / Au flash plating over Ni    |  |  |

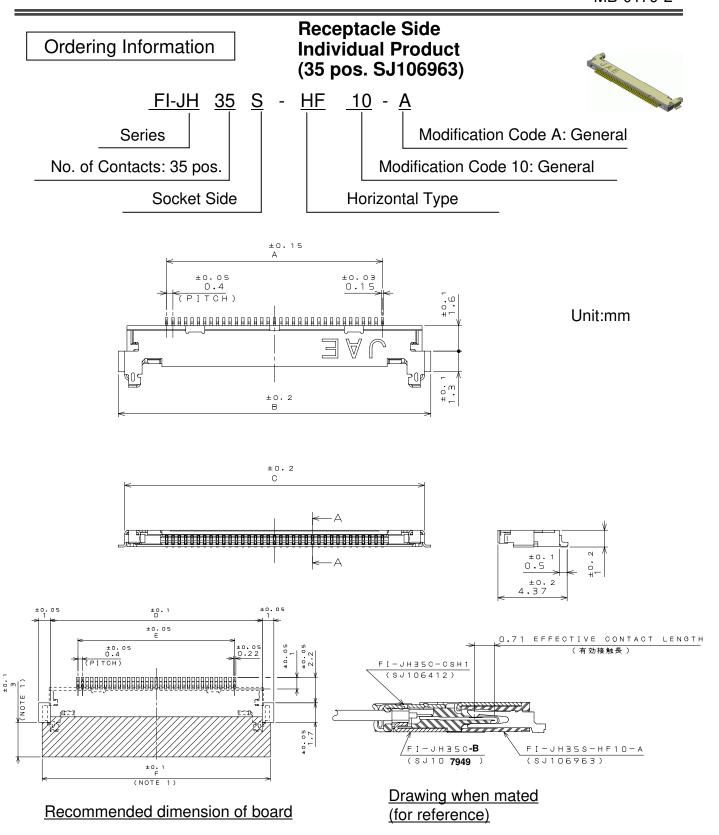
### **Receptacle Side** Ordering Information **Individual Product** (30, 40 pos. SJ106787) 10 FI-JH HF Series Modification Code 10: General No. of Contacts: 30, 40 pos. Horizontal Type Socket Side ±0.15 Unit:mm ±0.05 Ţ Ø ±0.2 B ±0.2 ±0.1 ±0.2 4.37 ±0,05 EFFECTIVE CONTACT LENGTH ±0.05 0.22 (有効接触長) F I - J H \* \* C - C S H 1 NOTE (SJ106412) F I - J H \* \* C-B ±o. F (SJ10 **8085**) (NOTE Drawing when mated Recommended dimension of board (for reference)

NOTE 1. Plug connector contact area: pattern and through hole are prohibited. However, ground is possible.

| Pin NO. | А    | В    | 0    | D    | E    | F    |
|---------|------|------|------|------|------|------|
| 4 0     | 15.6 | 21.7 | 20.9 | 20.4 | 15.6 | 21.8 |
| 3 0     | 11.6 | 17.7 | 16.9 | 16.4 | 11,6 | 17.8 |

#### **Receptacle Side** Ordering Information **Emboss Product** (30, 40 pos. SJ106788) FI-JH HF 10 R3000 **Emboss Product** Series 3000pcs. / reel No. of Contacts: 30, 40 pos. Modification Code 10: General Socket Side Horizontal Type Unit:mm **Dimensions** No.OF 30 40 CONTACTS DIRECTION 口 引出し方向 \* Α 28.4 40.4 В 32 44 С 14.2 20.2 D 19.7 23.7 2 - 2- -Е 33.5 45.5 ENDING PORTION 終端部 W/O CONNECTOR 空部 (40mm MIN.) BEGINNING PORTION(400mm MIN.) リーダ部 W/O CONNECTOR 空部 (20mm MIN.) W/H CONNECTOR コネクタ装着部 **\*** 0 DIRECTION 引出方向 5:1) (SCALE <del>---</del> R0.75 SECT. B-B(SCALE 2:1) В SECT. (SCALE

ø 380



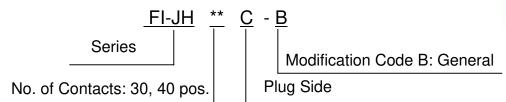
NOTE 1. Plug connector contact area: pattern and through hole are prohibited. However, ground is possible.

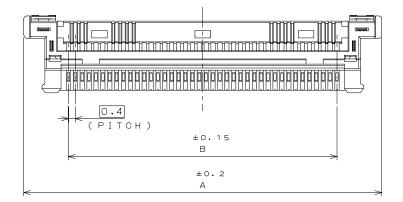
| NO.OF<br>CONTACTS(N) | А    | В    | С    | D    | Е    | F    |
|----------------------|------|------|------|------|------|------|
| 3 5                  | 13.6 | 19.7 | 18.9 | 18.4 | 13.6 | 19.8 |

#### **Receptacle Side Ordering Information Emboss Product** (35 pos. SJ106964) <u>FI-JH 35 S - HF 10 - A - R3000</u> **Emboss Product** Series 3000pcs. / reel Modification Code A: General No. of Contacts: 35 pos. Modification Code 10: General Socket Side Horizontal Type Unit:mm DIRECTION I 引出し方向 \* **Dimensions** NO.OF CONTACTS(N) Α С В D Е ø 380 2 2 2 35 28.4 32 14.2 21.7 33.5 ENDING PORTION 終端部 W/O CONNECTOR 空部 (40mm MIN.) BEGINNING PORTION(400mm MIN.) リーダ部 W/O CONNECTOR 空部 (20mm MIN.) W/H CONNECTOR コネクタ装着部 φ 0 DIRECTION 引出方向 +0.1 .0± 0.8 1.75 . 0 # +0.15 SECT. (SCALE 5:1) 1.5 .45 R0.75 SECT. B-B B-(SCALE SECT. A-A(SCALE

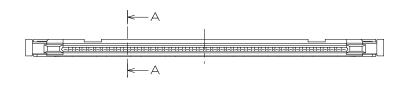
# Plug Side, Insulator (30, 40 pos. SJ108085)

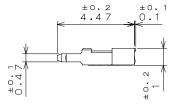


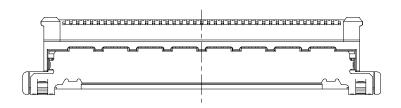


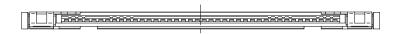


Unit:mm





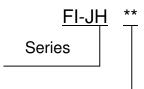




| No.OF<br>CONTACTS | А    | В    |
|-------------------|------|------|
| 4 0               | 20.8 | 15.6 |
| 3 0               | 16.8 | 11.6 |

## Plug Side Emboss Product (30, 40 pos. SJ108086)





No. of Contacts: 30, 40 pos.

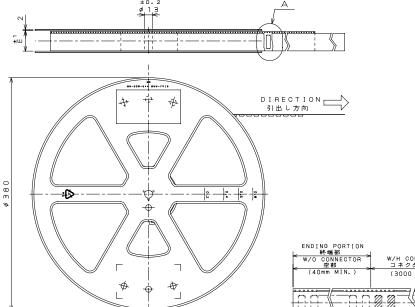
<u>B</u> - <u>R3000</u>

Emboss Product 3000pcs. / reel

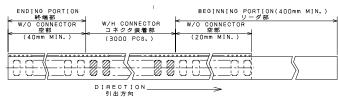
Modification Code B: General

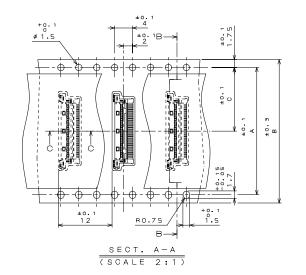
Plug Side

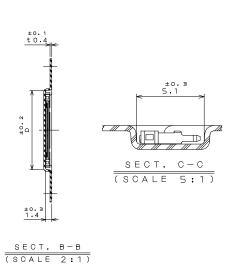
Unit:mm



| No.OF<br>CONTACTS | 30   | 40   |
|-------------------|------|------|
| А                 | 28.4 | 40.4 |
| В                 | 32   | 4 4  |
| С                 | 14.2 | 20.2 |
| D                 | 17.6 | 21.6 |
| E                 | 33.5 | 45.5 |

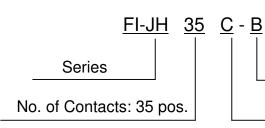






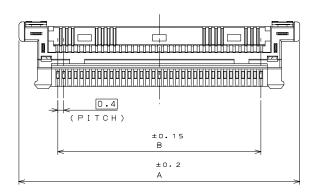
# Plug Side, Insulator (35 pos. SJ107949)



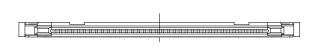


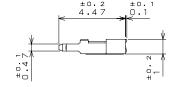
Modification Code B: General

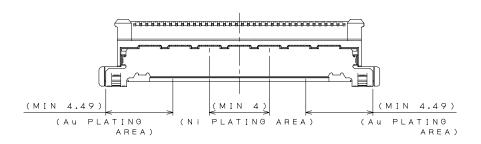
Plug Side



Unit:mm





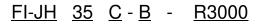




| NO.OF<br>CONTACTS(N) | А    | В    |
|----------------------|------|------|
| 3 5                  | 18.8 | 13.6 |

## Plug Side Emboss Product (35 pos. SJ107950)





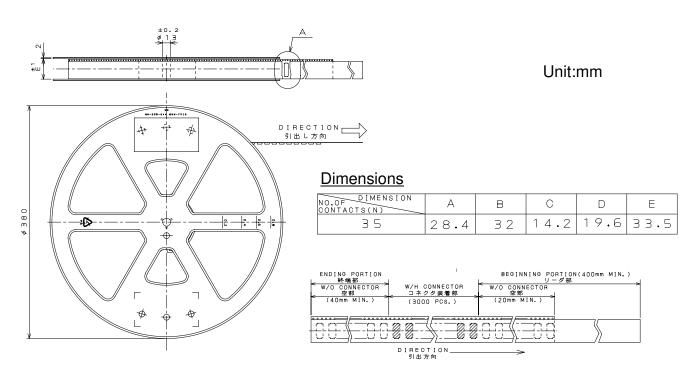
Series

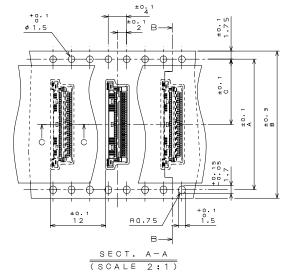
No. of Contacts: 35 pos.

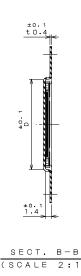
Emboss Product 3000pcs. / reel

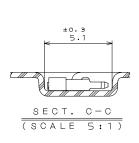
Modification Code B: General

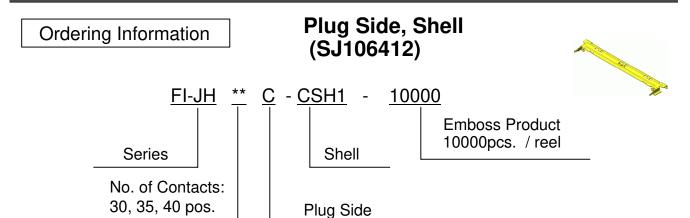
Plug Side



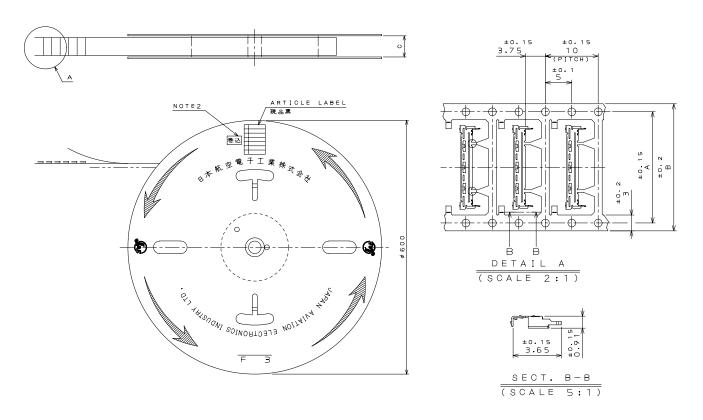








#### Unit:mm



| NO.OF DIMENSION | А   | В   | С   |
|-----------------|-----|-----|-----|
| 3 0             | 2 1 | 2 4 | 3 2 |
| 3 5             | 2 3 | 26  | 3 2 |
| 4 0             | 25  | 28  | 3 2 |

#### Related Documents

-Specifications(JACS): JACS-10363

-Harness Assembly Handling Instructions (JAHL)

30pos. : JAHL-10554-1 35pos. : JAHL-10363-2 40pos. : JAHL-10354-1

-Connector Handling Instructions (JAHL)

30pos.: JAHL-10363-10 35pos.: JAHL-10363-11 40pos.: JAHL-10363-10

-Connector Extraction Tools

30pos. SJ Drawing: SJ713201-00, P /N: SC-FIJH30-3 35pos. SJ Drawing: SJ713200-00, P /N: SC-FIJH35-3 40pos. SJ Drawing: SJ713198-00, P /N: SC-FIJH40-3

Tool Handling Instruction: T713198



-Plug Shell Cover Press-fit Tool Part Number: WT-FIJH-1-\*\* Handling Instruction: T714244



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Recommended applications and the commended applications are applications.

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Recommended applications: computers, office machines, measuring devices, telecommunication devices (terminals, mobile

telecommunication devices (terminals, mobile devices), AV devices, household applications, FA devices, etc.